

## INFORMATION ITEM

### Summary of Ecosystem Amendment Synthesis Papers

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**Summary:** Staff will discuss the development of three synthesis papers that will provide the scientific basis of an amendment to Chapter 4 of the Delta Plan, *Protect, Restore, and Enhance the Delta Ecosystem* (Ecosystem Amendment). This presentation will focus on the process of incorporating best available science for climate change, conservation planning and restoration, and the Delta's aquatic and terrestrial ecosystems through research and peer review. It will include a discussion of preliminary findings and considerations for policy and practice within the Delta. Staff will also discuss next steps in applying the findings of the synthesis work to development of the Ecosystem Amendment.

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### Background

The Delta Reform Act of 2009 requires that the Council adopt and coordinate implementation of a Delta Plan to achieve the State's coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place (Water Code Section 85000).

The Delta Plan was first adopted in 2013. Since then, significant progress in project implementation and a shift in State and federal priorities in the Delta has resulted in new opportunities for Delta ecosystem protection, restoration, and enhancement. In addition, new research and scientific information provides an improved understanding of key issues such as climate change effects and restoration approaches within the Delta and its watershed. As such, Council staff is developing an amendment of the Delta Plan's Chapter 4, *Protect, Restore, and Enhance the Delta Ecosystem*, that incorporates these advances and improves the ability to achieve the ecological goals of the Delta Reform Act.

At the October 2017 Council meeting, staff presented an informational item, "Approach and Timeline for Delta Plan Ecosystem Amendment". During this presentation, staff described the approach and scope of the Ecosystem Amendment, including considerations of best available science, extensive agency and public outreach, and an outline of the schedule and environmental review. At both the December 2017 and January 2018 Council meetings, staff provided updates through memoranda which summarized progress on the Ecosystem Amendment.

As described in these memoranda, staff has synthesized and conducted an initial review of the best available science in a number of topic areas including climate

change, conservation planning and restoration science, and the Delta's aquatic and terrestrial ecosystems. This review includes the development of three science synthesis papers that provide the scientific basis for the development of an Ecosystem Amendment. These synthesis papers will be available for public review in mid-March. In addition, staff has begun a thorough review of the current ecosystem Chapter 4, including narrative, recommendations, and policies, and is assessing the need for refinement given the synthesis of best available science that is currently underway.

### **Today's Discussion**

The purpose of today's presentation is to inform the Council about the development and preliminary findings of the science synthesis papers. This includes the process and scope of the research, level of scientific review and feedback, and a discussion of initial findings and considerations for policy and practice within the Delta. Staff will focus on the three main topics of the synthesis papers:

*Climate Change:* recent publications, improved data, analytical tools, and planning guidance have provided a more refined understanding of the implications of a shifting climate, sea level rise, and the importance of the Delta ecosystem considering these factors.

*Conservation Planning and Restoration Science:* discussion of the expected ecological outcomes associated with reserve design, restoration, and opportunities to enhance wildlife values on non-restored lands.

*Terrestrial and Aquatic Ecosystems:* status and trends of physical drivers, landforms, and vegetation communities, and opportunities to improve related ecological functions (e.g. food web dynamics, habitat connectivity, and how to assess species response to restoration).

### **Fiscal Information**

Not applicable.

### **List of Attachments**

None.

### **Contact**

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